

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

TABLE OF CONTENTS

PART Env-Ws 341 VARIANCES AND EXEMPTIONS

- Section Env-Ws 341.01 Definitions
- Section Env-Ws 341.02 Stringency of Variances and Exemptions
- Section Env-Ws 341.03 Consideration of a Variance or Exemption Request by the Department

PART Env-Ws 342 VARIANCES ISSUED BY THE DEPARTMENT

- Section Env-Ws 342.01 Requirements for a Variance
- Section Env-Ws 342.02 Request for a Variance
- Section Env-Ws 342.03 Content of Variance Request
- Section Env-Ws 342.04 Consideration of a Variance Request
- Section Env-Ws 342.05 Disposition of a Variance Request
- Section Env-Ws 342.06 Proposed Schedules for Compliance and Control Measures
- Section Env-Ws 342.07 Public Hearings on Variances and Schedules
- Section Env-Ws 342.08 Action After Hearing
- Section Env-Ws 342.09 Alternative Treatments Techniques
- Section Env-Ws 342.10 Treatment Techniques

PART Env-Ws 343 EXEMPTIONS ISSUED BY THE DEPARTMENT

- Section Env-Ws 343.01 Requirements for an Exemption
- Section Env-Ws 343.02 Exemption Request
- Section Env-Ws 343.03 Content of Exemption Request
- Section Env-Ws 343.04 Consideration of an Exemption Request
- Section Env-Ws 343.05 Disposition of an Exemption Request
- Section Env-Ws 343.06 Proposed Schedules for Compliance and Control Measures
- Section Env-Ws 343.07 Public Hearings on Exemption Schedules
- Section Env-Ws 343.08 Action After Hearing; Final Schedule
- Section Env-Ws 343.09 Extension of Date for Compliance
- Section Env-Ws 343.10 Bottled Water and Point-of-Use Devices

PART Env-Ws 344 MODIFYING WATER QUALITY

- Section Env-Ws 344.01 Treatment of Contaminants by Flow Mix

PART Env-Ws 345 BEST AVAILABLE TECHNOLOGY, TREATMENT TECHNIQUES OR OTHER MEANS GENERALLY AVAILABLE

- Section Env-Ws 345.01 BAT for Microbiological
- Section Env-Ws 345.02 BAT for Turbidity
- Section Env-Ws 345.03 Variances and Exemptions from the Maximum Contaminant Levels for Radionuclides
- Section Env-Ws 345.04 BAT for Alpha Radionuclides
- Section Env-Ws 345.05 BAT for Beta Radionuclides
- Section Env-Ws 345.06 Small System Compliance Technologies for Radionuclides

PART Env-Ws 346 BEST AVAILABLE TREATMENT (BAT) FOR INORGANIC CHEMICALS

- Section Env-Ws 346.01 BAT for Inorganics
- Section Env-Ws 346.02 Variances and Exemptions from the Maximum Contaminant Levels for Inorganic Chemicals
- Section Env-Ws 346.03 Variances from the Maximum Contaminant Level for Fluoride
- Section Env-Ws 346.04 Variances and Exemptions Concerning Corrosion Control
- Section Env-Ws 346.05 BAT Maximum Residual Disinfectant Levels

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

PART Env-Ws 347 BEST AVAILABLE TREATMENT - ORGANICS

Section Env-Ws 347.01 BAT for Volatile Organic Chemicals

Section Env-Ws 347.02 Variances and Exemptions from the Maximum Contaminant Levels for Organic Chemicals

Section Env-Ws 347.03 BAT Organics-Synthetic Organics

Section Env-Ws 347.04 Variances and Exemptions from the Maximum Contaminant Levels for Synthetic Organic Chemicals

Section Env-Ws 347.05 BAT Disinfection Byproducts

Section Env-Ws 347.06 Variances from the MCL Disinfection Byproducts

Section Env-Ws 347.07 Special Treatment Acrylamide and Epichlorohydrin

PART Env-Ws 348-349 - RESERVED

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

PART Env-Ws 341 VARIANCES AND EXEMPTIONS

Env-Ws 341.01 Definitions.

(a) “Exemption” means an exception from compliance to allow a public water system extra time to comply with a new national primary drinking water regulation (NPDWR), as described in 42 U.S.C. 300g-5.

(b) “Variance” means an exception from compliance to allow a public water system to deviate from the maximum contaminant level (MCL) of an NPDWR under certain conditions when exceptionally poor source water conditions prevent compliance with that NPDWR, as described in 42 U.S.C. 300g-4.
Honest

(c) “Unreasonable risk to health” means a situation where:

- (1) The MCL for E. coli would be exceeded;
- (2) The MCL for any other contaminant would be exceeded by a factor of 5 or more; or
- (3) If no MCL has been established, the health risk posed by the expected conditions would exceed a reasonable risk as determined using epidemiological studies.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-03-05

Env-Ws 341.02 Stringency of Variances and Exemptions. The department shall issue variances and exemptions from the requirements of these drinking water rules pursuant to Env-Ws 342 and Env-Ws 343, as applicable, under conditions and in a manner which are not less stringent than the conditions under which and the manner in which variances and exemptions are granted by EPA.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 341.03 Consideration of a Variance or Exemption Request by the Department. The department shall act on any variance or exemption request submitted to it within 90 days of receipt of the request.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

PART Env-Ws 342 VARIANCES ISSUED BY THE DEPARTMENT

Env-Ws 342.01 Requirements for a Variance.

(a) The department shall grant a variance to a public water system from a requirement respecting an applicable MCL established by Env-Ws 300 upon finding that:

- (1) Because of characteristics of the raw water sources which are reasonably available to the system, the system cannot meet the requirements respecting the MCL despite application of the best technology, treatment techniques, or other means;
- (2) The granting of a variance shall not result in an unreasonable risk to the health of persons served by the system; and
- (3) The variance is not prohibited by 40 CFR 141.4(a).

(b) The department shall grant a variance to a public water system from a requirement of an applicable

specified treatment technique upon a finding that the public water system applying for the variance has demonstrated that such treatment technique is not necessary to protect the health of persons because of the nature of the raw water source of such system.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 342.10)

Env-Ws 342.02 Request for a Variance.

(a) A supplier of water may request a variance for a public water system by submitting a request for a variance in writing to the department.

(b) Suppliers of water may submit a joint request for variances when they seek similar variances under similar circumstances.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 342.11)

Env-Ws 342.03 Content of Variance Request. Any written request for a variance shall include the following information:

(a) The name, location, and EPA identification number of the system(s) for which the variance is requested;

(b) The nature and duration of the variance requested;

(c) If the raw water source is a surface water, the name of the source and the location of the system's intake;

(d) If the raw water source is one or more wells, the type, depth, and location of the well(s);

(e) An assessment of all potential sources of pollution for the raw water source;

(f) Relevant analytical results of water quality samples from each system for which the variance is requested, including results of relevant tests conducted pursuant to the requirements of the drinking water rules;

(g) For any request made under Env-Ws 342.01(a):

(1) Information regarding all alternative water sources to which the system could economically connect, based on the system's size, capitalization, annual revenues, and other economic and geographic factors;

(2) A full explanation with supporting documentation of the best available treatment technology and techniques;

(3) Economic and legal factors relevant to the system's ability to comply;

(4) Analytical results of raw water quality relevant to the variance request;

(5) An assessment of whether any of the criteria listed in Env-Ws 341.01(c) would be met if the variance is granted;

(6) A proposed compliance schedule that specifies the date each step toward compliance will be achieved, including at a minimum the following dates:

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- a. The date by which arrangement for alternative raw water source or improvement of existing raw water source shall be completed;
 - b. The date of initiation of the connection of the alternative raw water source or improvement of existing raw water source; and
 - c. The date by which final compliance shall be achieved;
- (7) A plan for the provision of safe drinking water in the case of an excessive rise in the contaminant level for which the variance is requested; and
- (8) A plan for additional interim control measures during the effective period of the variance;
- (h) A statement signed by the applicant(s) that the system(s) will perform monitoring and other reasonable requirements prescribed by the department as a condition of the variance; and
- (i) Any other information believed by the applicant to be pertinent to the request.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 342.04 Consideration of a Variance Request.

- (a) The department shall act on a variance request within 90 days of receipt of a request that complies with Env-Ws 342.02 and Env-Ws 342.03.
- (b) In its consideration of whether the public water system is unable to comply with an applicable MCL because of the nature of the raw water source, the department shall consider the following:
- (1) The concentration of the contaminant in the water;
 - (2) The availability and effectiveness of treatment methods for the contaminant for which the variance is requested; and
 - (3) Cost and other economic considerations such as implementing treatment, improving the quality of the source water, or using an alternate source.
- (c) A variance shall be issued to a system only if it is still needed after the system applies the best technology, treatment techniques, or other means.
- (d) In its consideration of whether a public water system shall be granted a variance to a required treatment technique because such treatment is unnecessary to protect public health, the department shall consider the following:
- (1) Quality of the water source including water quality data and potential sources of pollution; and
 - (2) Source protection measures employed by the public water system.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 342.12)

Env-Ws 342.05 Disposition of a Variance Request.

- (a) The department shall notify the applicant in writing of its proposed decision on the application for

a variance.

- (b) If the department proposes to deny the application, the notice sent pursuant to (a), above, shall:
 - (1) State the reason(s) for the proposed denial;
 - (2) Offer the applicant an opportunity to present additional information or argument to the department within 30 days of the date of the notice; and
 - (3) Inform the applicant that if additional information is not received, the application shall be deemed denied as of the day following the deadline for submitting the information.
- (c) If the applicant submits additional information or argument, the department shall make a final determination on the request within 30 days after receiving the additional information or argument.
- (d) If the department proposes to grant a variance request, the notice sent pursuant to (a), above, shall identify:
 - (1) The name, location, and EPA identification number of the water system to which the variance will apply;
 - (2) The proposed variance;
 - (3) The period of time for which the variance will be effective;
 - (4) For a variance requested under Env-Ws 342.01(a), a proposed schedule in accordance with Env-Ws 342.06;
 - (5) For a variance requested under Env-Ws 342.01(a), that the variance shall be terminated:
 - a. When the system comes into compliance with the applicable rule; or
 - b. Upon a finding by the department, after public hearing, that the system has failed to comply with any requirements of a final schedule issued pursuant to Env-Ws 342.07(j) or Env-Ws 342.08, as applicable, and cannot or will not take steps to come back into compliance with the schedule; and
 - (6) For a variance requested under Env-Ws 342.01(b), that the variance shall be terminated if the department determines, after a public hearing, that:
 - a. The nature of the raw water source is such that the specified treatment technique for which the variance was granted is necessary to protect the health of persons; or
 - b. The public water system has failed to comply with monitoring and other requirements prescribed by the department as a condition to the granting of the variance.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 342.13)

Env-Ws 342.06 Proposed Schedules for Compliance and Control Measures.

- (a) For a variance requested under Env-Ws 342.01(a), the department shall propose a schedule for:
 - (1) Compliance, including increments of progress, by the public water system with each contaminant level requirement covered by the variance; and
 - (2) Implementation by the public water system of such additional control measures as the

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

department shall require for each contaminant covered by the variance.

(b) The proposed schedule for compliance shall specify dates by which steps towards compliance are to be taken, including, at a minimum, where applicable:

- (1) The date by which the arrangement for an alternative raw water source or improvement of existing raw water source shall be completed;
- (2) The date of initiation of the connection for the alternative raw water source or improvement of the existing raw water source; and
- (3) The date by which final compliance shall be achieved.

(c) The proposed schedule shall, if the public water system has no access to an alternative raw water source and can effect or anticipate no adequate improvement of the existing raw water source, specify an indefinite time period for compliance until a new and effective treatment technology is developed at which time a new compliance schedule shall be prescribed by the department.

(d) The proposed schedule for implementation of additional interim control measures during the period of variance shall specify interim treatment techniques, methods and equipment, and dates by which steps toward meeting the additional interim control measures shall be met.

(e) The final schedule shall be established by the department at the time of granting the variance, subsequent to the opportunity for hearing pursuant to Env-Ws 342.07.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 342.07 Public Hearings on Variances and Schedules.

(a) Before a variance and schedule proposed by the department pursuant to Env-Ws 342.05 and Env-Ws 342.06 shall take effect, the department shall provide notice and opportunity for public hearing on the variance and schedule. A notice given pursuant to this section shall cover as many variances as have been requested and a hearing held pursuant to such notice shall include each of the variances covered by the notice.

(b) Public notice of an opportunity for hearing on a variance and schedule shall be circulated in a manner designed to inform interested and potentially interested persons of the proposed variance and schedule, and shall include posting a public notice in the principal post office of each municipality or area served by the public water system, and:

- (1) Publishing a notice in a newspaper of general circulation in the area served by the public water system; or
- (2) Delivering notices door-to-door or by first class mail to each customer in the area served by the public water system.

(c) The public notice shall:

- (1) Include a summary of the proposed variance and schedule; and
- (2) Inform interested persons that they may request a public hearing on the proposed variance and schedule.

(d) Any interested person who wishes to request a public hearing shall submit the request to the department in writing within 30 days after the issuance of the public notices pursuant to (b), above.

(e) A request for public hearing shall include the following:

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(1) The name, mailing address, and daytime telephone number of the individual, organization, or other entity requesting a hearing;

(2) A brief statement of the interest the person making the request has in the proposed variance and schedule; and

(3) A brief summary of the information that the requester intends to submit at the public hearing.

(f) The request shall be signed by the individual making the request, or, if the request is made on behalf of an organization or other entity, by a responsible official of the organization or other entity.

(g) The department shall give notice in the manner set forth in (b), above, of any hearing to be held pursuant to a request submitted by an interested person or on the department's own motion. Notice of the hearing also shall be sent to the persons requesting the hearing, if any.

(h) Notice of the hearing shall:

(1) Include a statement of the purpose of the hearing;

(2) Specify the time and location of the hearing;

(3) Specify the address and telephone number of an office at which interested persons may obtain further information concerning the hearing; and-

(4) Be given not less than 15 days prior to the date scheduled for the hearing.

(i) A hearing convened pursuant to (g) above shall be conducted in accordance with the provisions of Env-C 200 pertaining to non-adjudicative hearings.

(j) The variance and schedule shall become effective 30 days after the notice of opportunity for a hearing is given pursuant to (b), above, if no timely request for a hearing is submitted and the department does not determine to hold a public hearing on its own motion.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 342.14)

Env-Ws 342.08 Action After Hearing. Within 30 days after the conclusion of the public hearing held pursuant to Env-Ws 342.07, the department shall, after taking into consideration information obtained during the hearing and other relevant information:

(a) Issue the variance and schedule as proposed;

(b) Issue a revised variance and schedule; or

(c) Deny the variance request.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 342.15)

Env-Ws 342.09 Alternative Treatment Techniques. The department shall grant a request for a variance from any treatment technique requirement upon a showing by the requestor that an alternative treatment technique not included in such requirement is at least as efficient in lowering the level of the contaminant with respect to which such requirement was prescribed. A variance under this paragraph shall be conditioned on the use of the alternative treatment technique which is the basis of the variance.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 342.16)

Env-Ws 342.10 Treatment Techniques.

(a) The department shall require community water systems and non-transient, non-community water systems to install and use any treatment method identified in Env-Ws 345 through Env-Ws 347 as a condition for granting a variance except as provided in (b), below. If after the installation of the treatment method the system still cannot meet the MCL, the system shall be eligible for a variance.

(b) If a system can demonstrate, through comprehensive engineering assessments which may include pilot plant studies, that the treatment methods identified in Env-Ws 345 through Env-Ws 347 would only achieve a de minimis reduction in contaminants, the department shall issue a schedule of compliance that requires the system being granted the variance to examine other treatment methods as a condition of obtaining the variance.

(c) If the department determines that a treatment method identified in (b), above, is technically feasible, the department shall require the system to install and use that treatment method in connection with a compliance schedule issued. The department's determination shall be based upon studies by the system and other relevant information.

(d) The department shall require a public water system to use bottled water or point-of-use devices or other means as a condition for granting a variance from the requirements of Env-Ws 345 through Env-Ws 347 to avoid an unreasonable risk to health.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 342.17)

PART Env-Ws 343 EXEMPTIONS ISSUED BY THE DEPARTMENT

Env-Ws 343.01 Requirements for an Exemption. The department shall exempt any public water system from any requirement respecting a maximum contaminant level (MCL) or any treatment technique requirement, or from both, established by an applicable drinking water rule upon a finding that:

(a) The public water system is unable to comply with such MCL or treatment technique requirement by the established deadline because:

- (1) The system will not be able to raise sufficient funds to install and use the required treatment technique or some other treatment method that would be adequate to meet the MCL prior to the deadline, due to factors beyond the control of the system;
- (2) The system has a long-term improvement plan that will render the need for such treatment technique unnecessary within the pay-back period for the financial investment needed to install and operate such treatment technique in the interim; or
- (3) Other circumstances exist which demonstrate that the benefit to be derived by meeting the MCL or installing the required treatment technique is outweighed by the cost of doing so;

(b) The public water system was in operation on the effective date of such MCL or treatment technique requirement; and

(c) Granting the exemption will not result in an unreasonable risk to health.

Source. (See Revision Note at chapter heading Env-Ws 300)

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-
Ws 343.10)

Env-Ws 343.02 Exemption Request.

(a) A supplier of water may request an exemption for a public water system by submitting a request for exemption in writing to the department.

(b) Suppliers of water may submit a joint request for exemptions when they seek similar exemptions under similar circumstances.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-
Ws 343.11)

Env-Ws 343.03 Content of Exemption Request. Any written request for an exemption shall include the following information:

(a) The name, location, and EPA identification number of the system for which the exemption is requested;

(b) The nature and duration of exemption requested;

(c) Relevant analytical results of water quality sampling of the system, including results of relevant tests conducted pursuant to the requirements of the drinking water rules;

(d) An explanation of the basis for the request, as described in Env-Ws 343.01(a);

(e) An assessment of whether any of the criteria listed in Env-Ws 341.01(c) would be met if the variance is granted;

(f) Any other information believed by the applicant to be pertinent to the application; and

(g) A proposed compliance schedule that specifies the date when each step toward compliance will be achieved.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 343.04 Consideration of an Exemption Request.

(a) The department shall act on any exemption request within 90 days of receipt of a complete request.

(b) In its consideration of whether the public water system is unable to comply due to compelling factors, the department shall consider such factors as the following:

(1) Construction, installation, or modification of the treatment equipment or systems;

(2) The time needed to put into operation a new treatment facility or to replace an existing system which is not in compliance; and

(3) The economic feasibility of compliance.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 343.12)

Env-Ws 343.05 Disposition of an Exemption Request.

(a) The department shall notify the applicant in writing of its proposed decision on the application for an exemption.

(b) If the department decides to deny the application for an exemption, the notice sent pursuant to (a), above, shall:

- (1) State the reason(s) for the proposed denial;
- (2) Offer the applicant an opportunity to present additional information or argument to the department within 30 days of receipt of the notice; and
- (3) Inform the applicant that if additional information or argument is not received, the application shall be deemed denied as of the day following the deadline for submitting the information.

(c) If the applicant submits additional information or argument, the department shall make a final determination on the request within 30 days after receiving the additional information or argument.–

(d) If the department proposes to grant an exemption request, the notice sent pursuant to (a), above, shall identify:

- (1) The name, location, and EPA identification number of the water system to which the exemption will apply;
- (2) The proposed exemption;
- (3) The termination date of the exemption; and
- (4) That the exemption shall be terminated:
 - a. When the system comes into compliance with the applicable rule; or
 - b. Upon a finding by the department, after public hearing, that the system has failed to comply with any requirements of a final schedule issued pursuant to Env-Ws 343.07(j) or Env-Ws 343.08, as applicable.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 343.13)

Env-Ws 343.06 Proposed Schedules for Compliance and Control Measures.

(a) For an exemption requested under Env-Ws 343.01, the department shall propose a schedule for:

- (1) Compliance, including increments of progress, by the public water system with each contaminant level requirement and treatment technique requirement covered by the exemption; and
- (2) Implementation by the public water system of such control measures as the department shall require for each contaminant covered by the exemption.

(b) The proposed schedule for compliance shall specify dates by which steps towards compliance are to be taken, including, at a minimum, the date by which final compliance shall be achieved.

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(c) The final schedule shall be established by the department at the time the exemption is granted, subsequent to the opportunity for a hearing pursuant to Env-Ws 343.07.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 343.07 Public Hearings on Exemption Schedules.

(a) Before an exemption and schedule proposed by the department pursuant to Env-Ws 343.05 and Env-Ws 343.06 shall take effect, the department shall provide notice and opportunity for a public hearing on the exemption and schedule. A notice given pursuant to this section may cover the proposal of more than one exemption and schedule and a hearing held pursuant to such notice shall include each of the exemptions and schedules covered by the notice.

(b) Public notice of an opportunity for a hearing on an exemption and schedule shall be circulated in a manner designed to inform interested and potentially interested persons of the proposed schedule, including at posting a public notice in the principal post office of each municipality or area served by the public water system, and:

- (1) Publishing a notice in a newspaper of general circulation; or
- (2) Delivering notices door-to-door or by first-class mail in the area served by the public water system.

(c) The public notice shall:

- (1) Include a summary of the proposed exemption and schedule; and
- (2) Informing interested persons that they may request a public hearing on the proposed exemption and schedule.

(d) Any interested person who wishes to request a public hearing shall submit the request to the department in writing within 30 days after the issuance of the public notices pursuant to (b), above.

(e) A request for public hearing shall include the following:

- (1) The name, mailing address, and daytime telephone number of the individual, organization, or other entity requesting a hearing;
- (2) A brief statement of the interest of the person making the request in the proposed schedule; and
- (3) A brief summary of the information that the requesting person intends to submit at the hearing.

(f) The request shall be signed by the individual making the request, or, if the request is made on behalf of an organization or other entity, by a responsible official of the organization or other entity.

(g) The department shall give notice in the manner set forth in (b), above, of any hearing to be held pursuant to a request submitted by an interested person or on the department's own motion. Notice of the hearing also shall be sent to the person requesting the hearing, if any.

(h) Notice of the hearing shall:

- (1) Include a statement of the purpose of the hearing;
- (2) Specify the time and location of the hearing;

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(3) Specify the address and telephone number of an office at which interested persons may obtain further information concerning the hearing; and

(4) Be given not less than 15 days prior to the date scheduled for the hearing.

(i) A hearing convened pursuant to (g), above, shall be conducted in accordance with the provisions of Env-C 200 pertaining to non-adjudicative hearings.

(j) The exemption and schedule shall become effective 30 days after the notice of opportunity for a hearing is given pursuant to (b), above, if no timely request for a hearing is submitted and the department does not determine to hold a public hearing on its own motion.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 343.14)

Env-Ws 343.08 Action After Hearing; Final Schedule.

(a) Within 30 days after the conclusion of the public hearing, the department shall, after taking into consideration information obtained during the hearing:

- (1) Issue the exemption and schedule as proposed;
- (2) Issue a revised exemption and schedule; or
- (3) Deny the exemption request.

(b) If the public water system has entered into an enforceable agreement to become a part of a regional public water system, such schedule shall require compliance by the public water system with each contaminant level and treatment technique requirement prescribed within 36 months after the issuance of the exemption.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 343.15)

Env-Ws 343.09 Extension of Date for Compliance.

(a) The final date for compliance provided in any schedule in the case of an exemption shall be extended by the department for a period not to exceed 3 years after the date of the issuance of the exemption if the public water system establishes that:

- (1) The system cannot meet the standard without capital improvements which cannot be completed within the period of the exemption;
- (2) In the case of a system which needs financial assistance for the necessary improvements, the system has entered into an agreement to obtain such financial assistance but will not be able to complete the necessary improvements within the period of the exemption for reasons beyond the control of the water system; or
- (3) The system has entered into an enforceable agreement to become a part of a regional public water system and the system is taking all practicable steps to meet the standard.

(b) In the case of a system which does not serve more than 500 service connections and which needs financial assistance for the necessary improvements, an extension granted under (a)(1) or (2), above, shall be renewed for one or more additional 2-year periods if the system establishes that it is taking all practicable

steps to come into compliance.

(c) If the department determines that a treatment method identified in Env-Ws 345 through Env-Ws 347 is technically feasible, the department shall require the system to install and use that treatment method in connection with a compliance schedule. The department's determination shall be based upon studies by the system and other relevant information.

(d) The department shall require a public water system to use bottled water or point-of-use devices or other means as a condition for granting an exemption from the requirements of Env-Ws 312 through Env-Ws 316 to avoid an unreasonable risk to health.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 343.16)

Env-Ws 343.10 Bottled Water and Point-of-Use Devices.

(a) The department shall require a public water system to provide bottled water or point-of-use devices or other means of response as a condition for granting an exemption from the requirements of Env-Ws 312 through Env-Ws 316.

(b) Public water systems that use bottled water as a condition of obtaining an exemption shall meet the requirements specified in Env-Ws 308.

(c) Public water systems that use point-of-use devices as a condition for receiving an exemption shall meet the requirements specified in Env-Ws 308.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 343.17)

PART Env-Ws 344 MODIFYING WATER QUALITY

Env-Ws 344.01 Treatment of Contaminants by Flow Mix.

(a) The owner of a public water system shall use flow mix, as defined in Env-Ws 302, as a treatment alternative only:

(1) For contaminants in excess of the MCL specified in Env-Ws 312 or Env-Ws 314 through Env-Ws 316; and

(2) In accordance with this section.

(b) Before beginning the design of a flow mix treatment system, the water system owner shall:

(1) Inform the department that the water system intends to use the flow mix treatment method; and

(2) Submit to the department flow mix calculations based on analyses of its water sources performed within the past 6 years, or a shorter record that demonstrates consistency of quality, that include the concentration and volume ratios proposed to be used for each source that demonstrate that the criteria of (c), below, will be met.

(c) The department shall approve the use of flow mix if the information submitted pursuant to (b), above, demonstrates that when the sources are combined at the correct ratio, the concentration level of the contaminant proposed to be treated by flow mixing will be reliably and consistently below the applicable

MCL.

- (d) The equipment used to verify and document proper flow mix treatment shall include:
 - (1) One control circuitry for all sources proposed for flow mix;
 - (2) Flow meters installed to measure the output from each source to be used;
 - (3) A device, such as a gate valve, on the piping from each source to allow that source's output to be regulated;
 - (4) A gate valve for the mixture; and
 - (5) A sample tap for each source and for the mixture.
- (e) The owner shall submit, on a quarterly basis:
 - (1) Records to document the actual source flows and the calculated, concentration-weighted ratio of the mixture on a monthly calculation basis; and
 - (2) Certification that the established flow mix ratios have been followed.
- (f) A water quality sample shall be taken and analyzed:
 - (1) From each source on an annual basis; and
 - (2) Of the mixture on a quarterly basis.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

PART Env-Ws 345 BEST AVAILABLE TECHNOLOGY, TREATMENT TECHNIQUES, OR OTHER MEANS GENERALLY AVAILABLE

Env-Ws 345.01 BAT for Microbiological.

- (a) The following shall be the best technology, treatment techniques, or other means available for achieving compliance with the MCL for total coliforms specified in Env-Ws 313.01:
 - (1) Protection of wells from contamination by coliforms by appropriate placement and construction as required in Env-Ws 370, Env-Ws 372, Env-Ws 373, Env-Ws 378, and Env-Ws 379;
 - (2) Maintenance of a disinfectant residual throughout the distribution system;
 - (3) Proper maintenance of the distribution system, including appropriate pipe replacement and repair procedures, main flushing programs, proper operation and maintenance of storage tanks and reservoirs, and continual maintenance of positive water pressure in all parts of the distribution systems;
 - (4) Filtration or disinfection, or both, of surface water, or disinfection of ground water using strong oxidants such as chlorine, chlorine dioxide, or ozone; and
 - (5) The development and implementation of a wellhead protection program in accordance with applicable provisions of Env-Ws 378, Env-Ws 379, and Env-Ws 421.
- (b) No variance or exemption from the MCL for bacteria specified in Env-Ws 313.01 shall be permitted.

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(c) No variances from the requirements of Env-Ws 380 concerning surface water filtration and disinfection shall be permitted. The granting of an exemption shall be specified in Env-Ws 380.26.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 345.02 BAT for Turbidity. No variances from the requirements of Env-Ws 380 concerning surface water filtration and disinfection shall be permitted. The granting of an exemption shall be as specified in Env-Ws 380.26.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 345.31)

Env-Ws 345.03 Variances and Exemptions from the Maximum Contaminant Levels for Radionuclides.

(a) The department shall process requests for variances and exemptions from the radionuclide MCLs as specified in Env-Ws 341 through Env-Ws 343.

(b) The department shall require a community water system to install and use any treatment method or methods identified in Env-Ws 345.04, Env-Ws 345.05, or Env-Ws 345.06 as a condition for granting a variance except as provided in (c), below. If after the installation of the treatment method the system still cannot meet the MCL, the system shall be eligible for a variance.

(c) If a system demonstrates through comprehensive engineering assessments, which may include pilot plant studies, that the treatment methods identified in Env-Ws 345.04, Env-Ws 345.05, or Env-Ws 345.06 would only achieve a de minimis reduction in the contaminant, the department shall issue a schedule of compliance that requires the system being granted the variance to examine other treatment methods as a condition of obtaining the variance.

(d) If the department determines that a treatment method or methods identified Env-Ws 345.04, Env-Ws 345.05, or Env-Ws 345.06 is technically feasible, the department shall require the system to install and use that treatment method in connection with a compliance schedule. The department's determination shall be based upon studies by the system and other relevant information.

(e) The department shall require a public water system to provide bottled water or other means as a condition for granting a variance from the requirements of Env-Ws 312.01 or Env-Ws 312.02 to avoid an unreasonable risk to health.

(f) A public water system that uses bottled water as a condition for receiving a variance from the requirements of Env-Ws 312.01 or Env-Ws 312.02 shall meet the requirements of Env-Ws 308 concerning bottled water.

(g) The department shall not grant an exemption from the MCLs for the following radionuclides:

- (1) Compliance gross alpha;
- (2) Radium 226;
- (3) Radium 228;
- (4) Total beta emitters; or
- (5) Total photon emitters.

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(h) A system owner may request an exemption from the uranium MCL if:

- (1) Due to compelling factors, the public water system is unable to comply with the MCL or implement measures to develop an alternative source of water supply;
- (2) The public water system was in operation on or before December 8, 2003, or if the system was not operating by this date, no reasonable alternative source of drinking water is available;
- (3) The exemption does not result in an unreasonable risk to public health; and
- (4) The management and restructuring changes cannot reasonably be made to lead to MCL compliance or improve the quality of water.

(i) The owner of a public water system unable to comply with the uranium MCL of 30 ug/L after December 8, 2003 may submit a written request to the department for an exemption as specified in Env-Ws 343.02.

(j) The department shall notify the system owner in writing of its determination to grant or deny the request.

(k) If a water system serving 3,301 persons or more receives an exemption from the department, the department shall issue a schedule requiring compliance as expeditiously as possible but no later than December 8, 2006.

(l) If a water system serving 3,300 persons or fewer receives an exemption from the department, the department shall issue a schedule requiring compliance as expeditiously as possible but no later than December 8, 2009.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8040, eff 2-14-04; ss by #8497, eff
11-30-05 (formerly Env-Ws 345.50)

Env-Ws 345.04 BAT for Alpha Radionuclides. Best available treatment for alpha emitters shall be as specified below:

- (a) For compliance gross alpha, ion exchange or reverse osmosis;
- (b) For uranium, ion exchange, reverse osmosis, lime softening, or coagulation with filtration; and
- (c) For radium 226, ion exchange, reverse osmosis, or lime softening.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8040, eff 2-14-04; ss by #8497, eff
11-30-05 (formerly Env-Ws 345.51)

Env-Ws 345.05 BAT for Beta Radionuclides. Best available treatment for beta emitters shall be as specified below:

- (a) For gross beta and photon emitters, ion exchange or reverse osmosis; and
- (b) For radium 228, ion exchange, reverse osmosis, or lime softening.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8040, eff 2-14-04; ss by #8497, eff
11-30-05 (formerly Env-Ws 345.60)

Env-Ws 345.06 Small System Compliance Technologies for Radionuclides.

- (a) Best available treatment for beta emitters shall be as specified in Table C of 40 CFR 141.66(h).

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(b) Compliance technologies by system size category for radionuclides shall be as specified in Table D of 40 CFR 141.66(h).

Source. #8040, eff 2-14-04; ss by #8497, eff 11-30-05 (formerly Env-Ws 345.61)

PART Env-Ws 346 BEST AVAILABLE TREATMENT (BAT) FOR INORGANIC CHEMICALS

Env-Ws 346.01 BAT for Inorganics.

(a) The best technology, treatment technique, or other means available for achieving compliance with the MCL specified in Env-Ws 314.01(b) shall be as identified in Table 346-1 below:

Table 346-1
Best Available Treatment for Inorganics

Chemical Name	BAT (See codes in Table 346-2)
Antimony	2,7
Arsenic	1,2,5,6,7,9
Asbestos	2,3,8
Barium	5,6,7,9
Beryllium	1,2,5,6,7
Cadmium	2,5,6,7
Chromium	2,5,6*,7
Cyanide	5,7,9,13
Fluoride	1***, 7***
Lead	See Env-Ws 381
Mercury	2**,4,6**,7**
Nitrate	5,7,9
Nitrite	5,7
Selenium	1,2***,6,7,9
Thallium	1,5

(b) The codes for Table 346-1 shall be as follows in Table 346-2.

Table 346-2
Codes for Table 346-1

Code	Treatment Method
*	BAT for chromium III only
**	BAT only if influent Mercury concentrations less than 10ug/l
***	BAT for selenium IV only
****	Central treatment only
1	Activated Alumina
2	Coagulation/Filtration (Not BAT for systems with less than 500 service connections)
3	Direct and Diatomite Filtration
4	Granular Activated Carbon
5	Ion Exchange
6	Lime softening, not BAT for systems less than 500 service connections
7	Reverse Osmosis
8	Corrosion Control
9	Electrodialysis
10	Reserved
11	Reserved

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

12	Reserved
13	Chlorine Oxidation
14	Ultraviolet

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; amd by #7645, eff 2-8-02; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 346.02 Variances and Exemptions from the Maximum Contaminant Levels for Inorganic Chemicals.

(a) The department shall require community water systems and non-transient, non-community water systems to install and use any treatment method identified in Env-Ws 346.01 as a condition for granting a variance except as provided in (b), below. If after the system installs the treatment method the system still cannot meet the MCL, the system shall be eligible for a variance.

(b) If a system can demonstrate through comprehensive engineering assessments, which may include pilot plant studies, that the treatment methods identified in Env-Ws 346.01 would only achieve a de minimis reduction in contaminants, the department shall issue a schedule of compliance that requires the system being granted the variance to examine other treatment methods as a condition of obtaining the variance.

(c) If the department determines that a treatment method identified in (b), above, is technically feasible, the department shall require the system to install and use that treatment method in connection with a compliance schedule. The department's determination shall be based upon studies by the system and other relevant information.

(d) The department shall require a public water system to use bottled water or point-of-use devices or other means as a condition for granting a variance or an exemption from the requirements of Env-Ws 314.01, to avoid an unreasonable risk to health.

(e) Public water systems that use bottled water as a condition for receiving a variance or an exemption from the requirements of Env-Ws 314.01 shall meet the requirements of Env-Ws 308 concerning bottled water.

(f) Systems that are approved to use a point-of-use or point-of-entry device to obtain a variance or exemption shall meet the condition(s) for such devices in Env-Ws 308.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 346.03 Variances from the Maximum Contaminant Level for Fluoride.

(a) The following shall be the required best technology, treatment techniques, or other means generally available for achieving compliance with the MCL for fluoride specified in Env-Ws 314.01 and Env-Ws 316.01:

- (1) Activated alumina absorption, centrally applied; and
- (2) Reverse osmosis, centrally applied.

(b) The department shall require a community water system to install and use any treatment method identified in (a), above, as a condition for granting a variance unless the department determines that such a treatment method is not available and effective for fluoride control for the system.

(c) A treatment method shall not be considered to be "available and effective" for an individual system if the treatment method would not be technically appropriate and technically feasible for that system. If, upon

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

application by a system for a variance, the department determines that none of the treatment methods identified in (a), above, are available and effective for the system, the system shall be granted a variance as to the availability and effectiveness of such treatment methods based upon studies by the system and other relevant information.

(d) If a system submits information to demonstrate that a treatment method is not available and effective for fluoride control for that system, the department shall make a finding whether this information supports a decision that such treatment method is not available and effective for that system before requiring installation and use of such treatment method.

(e) Pursuant to Env-Ws 342.04, the department shall issue a schedule of compliance that shall require the system being granted the variance to examine the following treatment methods to determine the probability that any of these methods will significantly reduce the level of fluoride for that system:

- (1) Modification of lime softening;
- (2) Alum coagulation;
- (3) Electrodialysis;
- (4) Anion exchange resins;
- (5) Well field management;
- (6) Alternate source; and
- (7) Regionalization.

(f) If such a probability exists, the system shall determine whether any of these methods are technically feasible and economically reasonable, and that the fluoride reductions obtained will be commensurate with the costs incurred with the installation and use of such treatment methods for that system.

(g) If the department determines that a treatment method is available, the department shall require the system to install and use that treatment method in connection with a compliance schedule. The department's determination shall be based upon studies by the system and other relevant information.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 346.04 Variances and Exemptions Concerning Corrosion Control. Criteria concerning variances and exemptions concerning corrosion control shall be as stated in Env-Ws 381.35.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 346.05 BAT Maximum Residual Disinfectant Levels. The control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels shall be the best available technology, treatment technique, or means available for achieving compliance with the maximum residual disinfectant levels specified in Table 315-5.

Source. #7735, eff 8-2-02; ss by #8497, eff 11-30-05

PART Env-Ws 347 BEST AVAILABLE TREATMENT - ORGANICS

Env-Ws 347.01 BAT for Volatile Organic Chemicals. The required technologies listed in Table 347-1 below shall be the best technology, treatment techniques, or other means available for achieving compliance

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

with the MCL level for volatile organic chemicals (VOCs) specified in Env-Ws 315.01(a).

Table 347-1
Best Available Treatment for Volatile Organic Chemicals (VOCs)

VOC	Treatment	
	Granular Activated Carbon (AC)	Packed Tower Aeration (PT)
Benzene	AC	PT
Carbon tetrachloride	AC	PT
cis-1,2 Dichloroethylene	AC	PT
1,2 Dichloroethane	AC	PT
Trichloroethylene	AC	PT
Para-dichlorobenzene (1,4-Dichlorobenzene)	AC	PT
1,1 Dichloroethylene	AC	PT
Dichloromethane (Methylene chloride)		PT
1,2 Dichloropropane	AC	PT
Ethylbenzene	AC	PT
Methyl tertiary-butyl ether (MtBE)	AC	PT
Monochlorobenzene (chlorobenzene)	AC	PT
o-Dichlorobenzene	AC	PT
Styrene	AC	PT
Tetrachloroethylene	AC	PT
Toluene	AC	PT
trans-1,2 Dichloroethylene	AC	PT
1,2,4 Trichlorobenzene	AC	PT
1,1,2 Trichloroethane	AC	PT
Trichloroethylene	AC	PT
1,1,1 Trichloroethane	AC	PT
Vinyl chloride	AC	
Xylene (Total)	AC	PT

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; amd by #7261, eff 5-4-00; ss by #8497, eff 11-30-05

Env-Ws 347.02 Variances and Exemptions from the Maximum Contaminant Levels for Organic Chemicals.

(a) The required technologies listed in Env-Ws 347.01 shall be the best technology, treatment techniques, or other means available for achieving compliance with the MCLs for organic chemicals specified in Env-Ws 315.01 and Env-Ws 347.03.

(b) The department shall require community water systems and non-transient, non-community water systems to install and use any treatment method identified in Env-Ws 347.01 as a condition for granting a variance except as provided in (c), below. If after the system installs the treatment method the system still cannot meet the MCL, the system shall be eligible for a variance.

(c) If a system can demonstrate through comprehensive engineering assessments, which may include pilot plant studies, that the treatment methods identified in Env-Ws 347.01 would only achieve a de minimis reduction in contaminants, the department shall issue a schedule of compliance that requires the system being granted the variance to examine other treatment methods as a condition of obtaining the variance.

(d) If the department determines that a treatment method identified in (c), above, is technically

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

feasible, the department shall require the system to install and use that treatment method in connection with a compliance schedule issued. The department's determination shall be based upon studies by the system and other relevant information.

(e) The department shall require a public water system to use bottled water or point-of-use devices or other means as a condition for granting a variance or an exemption from the requirements of Env-Ws 315.01 to avoid an unreasonable risk to health.

(f) Public water systems that use bottled water as a condition for receiving a variance or an exemption from the requirements of Env-Ws 315.01 shall meet the requirements of Env-Ws 308.11 concerning bottled water.

(g) Public water systems that use point-of-use devices as a condition for obtaining a variance or an exemption from Env-Ws 315.01 for organic chemicals shall meet the applicable conditions of Env-Ws 308.

Source. (See Revision Note at chapter heading Env-Ws 300)
#6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05,
EXPIRES: 12-1-05; ss by #8497, eff 11-30-05

Env-Ws 347.03 BAT Organics-Synthetic Organics.

(a) The required technology listed in Table 347-2 below shall be the best technology, treatment techniques, or other means available for achieving compliance with the MCL level for synthetic organics as specified Env-Ws 315.02(a):

Table 347-2
Best Available Treatment for Synthetic Organics

Synthetic Organic Chemical	Treatment		
	Granular Activated Carbon (AC)	Packed Tower Aeration (PT)	Oxidation Chlorine or Ozonation (O)
Alachlor	AC		
Aldicarb	AC		
Aldicarb sulfoxide	AC		
Aldicarb sulfone	AC		
Atrazine	AC		
Carbofuran	AC		
Chlordane	AC		
Dalapon	AC		
Dibromochloropropane (DBCP)	AC	PT	
Di(ethylhexyl)adipate	AC	PT	
Di(ethylhexyl)phthalate	AC		
Dinoseb	AC		
Diquat	AC		
Endothall	AC		
Endrin	AC		
Ethylene Dibromide (EDB)	AC	PT	
Glyphosate			O
Heptachlor	AC		
Heptachlor epoxide	AC		
Hexachlorobenzene	AC		
Hexachlorocyclopentadiene	AC	PT	
Lindane	AC		
Methoxychlor	AC		
Oxaml (Vydate)	AC		

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

PAH:			
Benzo(a)pyrene	AC		
Picloram	AC		
Polychlorinated Biphenyls (PCB)	AC		
Pentachlorophenol	AC		
Simazine	AC		
Toxaphene	AC		
2,3,7,8 TCDD Dioxin	AC		
2,4,5-TP (silvex)	AC		
2,4-D	AC		

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 347.40)

Env-Ws 347.04 Variances and Exemptions from the Maximum Contaminant Levels for Synthetic Organic Chemicals.

(a) The required technologies listed in paragraphs Env-Ws 347.03 shall be the best technology, treatment techniques, or other means available for achieving compliance with the maximum contaminant levels for organic chemicals specified in Env-Ws 315.02.

(b) The department shall require community water systems and non-transient, non-community water systems to install and use any treatment method identified in Env-Ws 347.03 as a condition for granting a variance except as provided in (c), below. If after the system installs the treatment method the system still cannot meet the MCL, the system shall be eligible for a variance.

(c) If a system can demonstrate through comprehensive engineering assessments, which may include pilot plant studies, that the treatment methods identified in Env-Ws 347.03 would only achieve a de minimis reduction in contaminants, the department shall issue a schedule of compliance that requires the system being granted the variance to examine other treatment methods as a condition of obtaining the variance.

(d) If the department determines that a treatment method identified in (c), above, is technically feasible, the department shall require the system to install and use that treatment method in connection with a compliance schedule issued. The department's determination shall be based upon studies by the system and other relevant information.

(e) The department shall require a public water system to use bottled water or point-of-use devices or other means as a condition for granting a variance from the requirements of Env-Ws 315.02 to avoid an unreasonable risk to health.

(f) Public water systems that use bottled water as a condition for receiving a variance from the requirements of Env-Ws 315.02 shall meet the requirements of Env-Ws 308.11 concerning bottled water.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 347.41)

Env-Ws 347.05 BAT Disinfection Byproducts. The technology listed in Table 347-3 below shall be the best technology, treatment technique, or other means available for achieving compliance with the MCL level for disinfection byproducts as specified in Env-Ws 315.03:

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

Table 347-3
BAT For Disinfection Byproducts

Disinfection Byproduct	Best available technology
TTHM	Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant
HAA5	Enhanced coagulation or enhanced softening or GAC10, with chlorine as the primary and residual disinfectant.
Bromate	Control of ozone treatment process to reduce production of bromate.
Chlorite	Control of treatment processes to reduce disinfectant demand and control of disinfection treatment processes to reduce disinfectant levels.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #7735, eff 8-2-02; ss by #8497, eff 11-30-05 (formerly Env-Ws 347.701)

Env-Ws 347.06 Variances from the MCL Disinfection Byproducts.

(a) The following shall be the required best technology, treatment techniques, or other means generally available for achieving compliance with the MCL for total trihalomethanes (TTHM):

- (1) Use of chloramines as an alternate or supplemental disinfectant or oxidant;
- (2) Use of chlorine dioxide as an alternate or supplemental disinfectant or oxidant;
- (3) Improved existing clarification for trihalomethane (THM) precursor reduction;
- (4) Moving the point of chlorination to reduce TTHM formation and, where necessary, substituting for the use of chlorine as a pre-oxidant chloramines, chlorine dioxide or potassium permanganate; and
- (5) Use of powdered activated carbon for THM precursor or TTHM reduction seasonally or intermittently at dosages not to exceed 10 mg/L on an annual average basis.

(b) The department shall require a community water system to install and use any treatment method identified in (a), above, as a condition for granting a variance unless the department determines that such treatment method identified in (a), above, is not available and effective for TTHM control for the system.

(c) A treatment method shall not be considered to be “available and effective” for an individual system if the treatment method would not be technically appropriate and technically feasible for that system or would only result in a marginal reduction in TTHM for the system. If, upon application by a system for a variance, the department determines that none of the treatment methods identified in (a), above, are available and effective for the system, that system shall be entitled to a variance. The department’s determination as to the availability and effectiveness of such treatment methods shall be based upon studies by the system and other relevant information.

(d) If a system submits information intending to demonstrate that a treatment method is not available and effective for TTHM control for that system, the department shall make a finding whether this information supports a decision that such treatment method is not available and effective for that system before requiring installation and use of such treatment method.

(e) Pursuant to Env-Ws 342.05, the department shall issue a schedule of compliance that shall require the system being granted the variance to examine the following treatment methods to determine the probability that any of these methods will significantly reduce the level of TTHM for that system:

- (1) Introduction of off-line water storage for THM precursor reduction;

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- (2) Aeration for TTHM reduction, where geographically and environmentally appropriate;
- (3) Introduction of clarification where not currently practiced;
- (4) Consideration of alternative sources of raw water; and
- (5) Use of ozone as an alternate or supplemental disinfectant or oxidant.

(f) If such probability exists, the system shall determine whether any of these methods are technically feasible and economically reasonable, and that the TTHM reductions obtained shall be commensurate with the costs incurred with the installation and use of such treatment methods for that system.

(g) If the department determines that a treatment method is available, the department shall require the system to install and use that treatment method in connection with a compliance schedule. Determination shall be based upon studies by the system and other relevant information. In no event shall the department require a system to install and use a treatment method not described in (a) or (c), above, to obtain or maintain a variance from the TTHM rule or in connection with any variance compliance schedule.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; amd and renumbered by #7735, eff 8-2-02 (formerly Env-Ws 347.70); ss by #8497, eff 11-30-05 (formerly Env-Ws 347.71)

Env-Ws 347.07 Special Treatment for Acrylamide and Epichlorohydrin.

- (a) The requirements in this section shall constitute primary drinking water rules.
- (b) The purpose of this section is to establish treatment techniques in lieu of MCLs for acrylamide and epichlorohydrin.
- (c) Each public water system shall certify annually in writing to the department that when acrylamide or epichlorohydrin are used in drinking water systems, the combination of dose and monomer level does not exceed the following specified level:

- (1) For acrylamide, 0.05% dosed at 1 ppm; and
- (2) For epichlorohydrin, 0.01% dosed at 20 ppm.

Source. (See Revision Note at chapter heading Env-Ws 300) #6521, eff 6-4-97; ss by #8360, INTERIM, eff 6-4-05, EXPIRES: 12-1-05; ss by #8497, eff 11-30-05 (formerly Env-Ws 347.90)

APPENDIX

Rule Section(s)	State Statute(s) Implemented	Federal Regulation(s) Implemented
Env-Ws 341	RSA 485:3, III; RSA 485:42	40 CFR 142.1 Subpart A
Env-Ws 342	RSA 485:3, III; RSA 485:42	40 CFR 142 Subpart E
Env-Ws 343	RSA 485:3, III; RSA 485:42	40 CFR 142 Subpart F
Env-Ws 344	RSA 485:3, III; RSA 485:42	40 CFR 142 Subpart B
Env-Ws 345	RSA 485:3, III; RSA 485:42	40 CFR 142 Subpart G
Env-Ws 346	RSA 485:3, III; RSA 485:42	40 CFR 142 Subpart G
Env-Ws 347	RSA 485:3, III; RSA 485:42	40 CFR 142 Subpart G